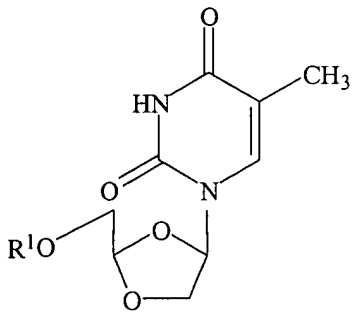
In the claims:

1. (Original) A method of treating an HIV infection in a patient, wherein said HIV infection exhibits resistance to 3TC or AZT, said method comprising administering to a patient in need of therapy an effective amount of a dioxolane thymine compound according to the chemical structure:



where R^1 is H, an acyl group, a C_1—C_{20} alkyl or ether group, a phosphate, diphosphate, triphosphate or phosphodiester group, or a pharmaceutically acceptable salt thereof.

2. (Original) The method according to claim 1, wherein said HIV infection is resistant to 3TC.

3. (Original) The method according to claim 1 wherein said HIV infection is resistant to AZT.

4. (Original) The method according to claim 1 wherein said HIV infection is resistant to both 3TC and AZT.

5. (Previously presented) The method according to claim 1 wherein said dioxolane thymine compound is coadministered with at least one anti-HIV agent which inhibits HIV by a mechanism other than through inhibition of viral thymidine kinase.

6. (Previously presented) The method according to claim 1 wherein said dioxolane thymine compound is coadministered with at least one anti-HIV agent selected from the group consisting of nucleoside reverse transcriptase inhibitors, non-nucleoside reverse transcriptase inhibitors, protease inhibitors and fusion inhibitors.

7. (Previously presented) The method according to claim 1 wherein dioxolane thymine compound is coadministered with at least one anti-HIV agent selected from the group consisting of 3TC, AZT, (-)-FTC, ddI, ddC, abacavir, tenofovir, D-D4FC, D4T, Racivir, L-D4FC, NVP, DLV, EFV, SQVM, RTV, IDV, SQV, NFV, APV, LPV, fuseon and mixtures thereof.

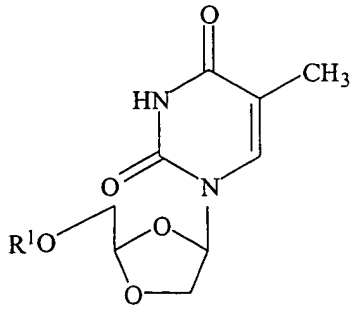
8. (Previously presented) The method according to claim 1 wherein R^1 is H, a C_2-C_{18} acyl group, a phosphate group, a phosphodiester group, or a pharmaceutically acceptable salt thereof.

9. (Previously presented) The method according to claim 1 wherein R^1 is H.

10. (Original) The method according to claim 6 wherein R^1 is H.

11. (Original) The method according to claim 7 wherein R^1 is H.

12. (Previously presented) A method of treating a drug resistant HIV infection in a patient, comprising administering to a patient in need of therapy an effective amount of a dioxolane thymine compound according to the chemical structure:



where R^1 is H, an acyl group, a C_1—C_{20} alkyl or ether group, a phosphate, diphosphate, triphosphate or phosphodiester group, or a pharmaceutically acceptable salt thereof in combination with at least one anti-HIV agent which inhibits HIV by a mechanism other than through inhibition of viral thymidine kinase.

13. (Original) The method according to claim 12, wherein said HIV infection is resistant to 3TC and/or AZT.

14. (Original) The method according to claim 13 wherein said HIV infection is resistant to 3TC.

15. (Original) The method according to claim 13 wherein said HIV infection is resistant to AZT.

16. (Original) The method according to claim 13 wherein said HIV infection is resistant to both 3TC and AZT.

17. (Previously presented) The method according to claim 12 wherein said dioxolane thymine compound is coadministered with at least one anti-HIV agent selected from the group consisting of nucleoside reverse transcriptase inhibitors, non-nucloeoside reverse transcriptase inhibitors, protease inhibitors and fusion inhibitors.

18. (Previously presented) The method according to claim 12 wherein said dioxolane thymine compound is coadministered with at least one anti-HIV agent selected from the group consisting of 3TC, (-)-FTC, ddI, ddC, abacavir, tenofovir, D-D4FC, racivir, L-D4FC, NVP, DLV, EFV, SQVM, RTV, IDV, SQV, NFV, APV, LPV, fuseon and mixtures thereof.

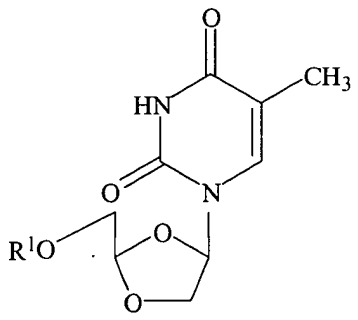
19. (Previously presented) The method according to claim 12 wherein R^1 is H, a C_2-C_{18} acyl group, a phosphate group, a phosphodiester group, or a pharmaceutically acceptable salt thereof.

20. (Original) The method according to claim 12 wherein R^1 is H.

21. (Original) The method according to claim 17 wherein R^1 is H.

22. (Original) The method according to claim 18 wherein R^1 is H.

23. (Previously presented) A pharmaceutical composition for use in treating drug resistant HIV comprising an effective amount of at least one dioxolane thymine compound according to the chemical structure:



where R^1 is H, an acyl group, a C_1—C_{20} alkyl or ether group, a phosphate, diphosphate, triphosphate or phosphodiester group, or a pharmaceutically acceptable salt thereof in combination with an effective amount of at least one additional anti-HIV agent which inhibits HIV by a mechanism other than through inhibition of viral thymidine kinase, optionally in combination with a pharmaceutically acceptable carrier, additive or excipient.

24. (Previously presented) The composition according to claim 23 wherein said additional anti-HIV agent is selected from the group consisting of nucleoside reverse transcriptase inhibitors, non-nucleoside reverse transcriptase inhibitors, protease inhibitors and fusion inhibitors.

25. (Original) The composition according to claim 23 wherein said additional anti-HIV agent is selected from the group consisting of 3TC, AZT, (-)-FTC, ddI, ddC, abacavir, tenofovir, D-D4FC, Racivir, L-D4FC, NVP, DLV, EFV, SQVM, RTV, IDV, SQV, NFV, APV, LPV, fuseon and mixtures thereof.

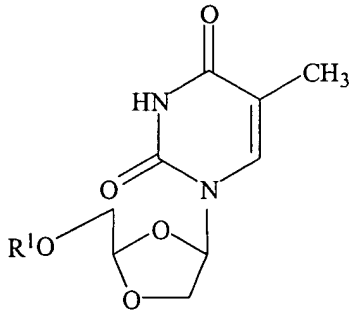
26. (Original) The composition according to claim 23 wherein R^1 is H, a C_2-C_{18} acyl group, a phosphate group, a phosphodiester group, or a pharmaceutically acceptable salt thereof.

27. (Original) The composition according to claim 23 wherein R^1 is H.

28. (Original) The composition according to claim 24 wherein R^1 is H.

29. (Original) The composition according to claim 25 wherein R^1 is H.

30. (Previously presented) A method of reducing the likelihood that a patient will be infected with drug resistant HIV, said method comprising administering administering to a patient at risk for developing HIV an effective amount of a dioxolane thymine compound according to the chemical structure:



where R^1 is H, an acyl group, a C_1—C_{20} alkyl or ether group, a phosphate, diphosphate, triphosphate or phosphodiester group, or a pharmaceutically acceptable salt thereof, optionally in combination with at least one anti-HIV agent which inhibits HIV by a mechanism other than through inhibition of viral thymidine kinase.

31. (Original) The method according to claim 30, wherein said HIV is resistant to 3TC and/or AZT.

32. (Original) The method according to claim 30 wherein said HIV is resistant to 3TC.

33. (Original) The method according to claim 30 wherein said HIV is resistant to AZT.

34. (Original) The method according to claim 30 wherein said HIV is resistant to both 3TC and AZT.

35. (Original) The method according to claim 30 wherein said anti-HIV agent is selected from the group consisting of nucleoside reverse transcriptase inhibitors, non-nucloeoside reverse transcriptase inhibitors, protease inhibitors and fusion inhibitors.

36. (Original) The method according to claim 30 wherein said anti-HIV agent is selected from the group consisting of 3TC, (-)-FTC, ddI, ddC, abacavir, tenofovir, D-D4FC, racivir, L-D4FC, NVP, DLV, EFV, SQVM, RTV, IDV, SQV, NFV, APV, LPV, fuseon and mixtures thereof.

37. (Original) The method according to claim 30 wherein R^1 is H, a C_2-C_{18} acyl group, a phosphate group, a phosphodiester group, or a pharmaceutically acceptable salt thereof.

38. (Original) The method according to claim 30 wherein R^1 is H.

39. (Original) The method according to claim 35 wherein R^1 is H.

40. (Original) The method according to claim 36 wherein R^1 is H.

41-44. (Cancelled)

45. (Previously presented) The method according to claim 12 wherein said HIV infection is caused by a drug resistant strain of HIV selected from the group consisting of XXBRU, K65R, M184V, L74V, 4XAZT, T215Y, K103N, T215Y/M184V, 5705-72, 488-101, C910-6, LA1M184V and G910-6.

46. (Previously presented) The method according to claim 30 wherein said HIV is a strain selected from the group consisting of XXBRU, K65R, M184V, L74V, 4XAZT, T215Y, K103N, T215Y/M184V, 5705-72, 488-101, C910-6, LA1M184V and G910-6.

47. (Previously presented) The composition according to claim 23 wherein said drug resistant HIV is a strain selected from the group consisting of XXBRU, K65R, M184V, L74V, 4XAZT, T215Y, K103N, T215Y/M184V, 5705-72, 488-101, C910-6, LA1M184V and G910-6.

48. (New) The method according to claim 45 wherein said HIV infection is caused by a drug resistant strain of HIV selected from the group consisting of K65R, M184V and T215Y.

49. (New) The method according to claim 46 wherein said HIV infection is caused by a drug resistant strain of HIV selected from the group consisting of K65R, M184V and T215Y.

50. (New) The method according to claim 47 wherein said HIV infection is caused by a drug resistant strain of HIV selected from the group consisting of K65R, M184V and T215Y.